

## B.17 DISCOVERY DATA ANALYSIS

### 1. Scope of Program

The objective of the Discovery Data Analysis (DDA) program is to enhance the scientific return of completed Discovery missions by broadening the scientific participation in the analysis of data collected by those missions. In particular, candidate missions include the Near Earth Asteroid Rendezvous (NEAR) mission, the Lunar Prospector mission, and the Deep Space 1 (DS1) encounter in 2001 with Comet Borrelly. For the NEAR mission, proposals may address the analysis and interpretation of data from its 1997 encounter with asteroid 253 Mathilde, its 1998 encounter with asteroid 433 Eros, and its prime mission in orbit around 433 Eros during 2000-2001, through to its final landing on that asteroid. While investigations proposed to DDA program must enhance the science return from one of the three missions identified above, an investigator may additionally propose tasks that involve one or more of the following activities:

- Modeling;
- Development of basic theory;
- Laboratory studies that are relevant to the interpretation of mission data;
- Correlative analyses of asteroid or comet data from other missions (*e.g.*, Galileo) and/or ground-based observations; and
- Research that seeks to place the results of these three missions in a larger context of small body and/or lunar processes and evolution.

Conversely, DDAP is not intended to support the acquisition of new observations nor support ground-based observing facilities except in cases where a compelling case is made that the proposed spacecraft data investigation can significantly benefit from the acquisition and analysis of such data.

Note that to enable OSS to properly evaluate the relevance of proposals submitted to its programs, as well as track its progress towards achieving its goals as mandated by the Government Performance Review Act (GPRA), all research supported by NASA's programs must now demonstrate its relationship to NASA Goals and Research Focus Areas (RFAs) as stated in the latest version of its Strategic Plan (follow links from the Web site <http://space.science.nasa.gov/>); see also the discussion in Section I of the *Summary of Solicitation* of this NRA. Therefore, all proposers to this program element are asked to state their perception of this relevance in terms of the Goals, Science Objectives, and RFAs given in Table 1 found in the *Summary of Solicitation*. This program element is designed to help fulfill a wide variety of the RFAs for the Science Objectives 1 and 2 for Goal II of the Solar System Exploration science theme.

## 2. Sources of Information and Data

It is the responsibility of the investigators selected for this program to acquire any needed data. Therefore, before submitting a proposal, the investigator should determine that required data are available. NEAR, Lunar Prospector, and DS1 data are available from the Planetary Data System (PDS) that can be accessed via the Internet at <http://pds.jpl.nasa.gov/>. Additional detailed information about the NEAR mission, spacecraft, and instruments can be obtained at the NEAR web site, <http://near.jhuapl.edu/>. Lunar Prospector information may be obtained at the web site <http://lunar.arc.nasa.gov/>. Information about the DS1 mission, spacecraft, and instruments may be found at the web site <http://nmp.jpl.nasa.gov/ds1/>.

## 3. Programmatic Information

It is anticipated that approximately \$3M will be available for this program in Fiscal Year (FY) 2005. At the present time, 34 tasks are in progress, and pending the submission of proposals of adequate merit, up to 20 more may be selected from proposals submitted in response to this Announcement, for which about \$2M is available for support. Investigations may be proposed for a one-, two-, or three-year period of performance.

An *Annual Progress Report* will be due no later than 60 days in advance of the anniversary date of the award and is to be submitted as an attachment to an E-mail message to the Program Officer for this program. Note that as an additional change from past practice, a revised budget for any remaining years of an approved award is neither necessary nor expected; the multiple year budget approved at the time of the original award is considered binding barring the development of unforeseen, extreme issues (see Section D.4 of Appendix D of the *Guidebook for Proposers* for further details).

### IMPORTANT INFORMATION

The *Summary of Solicitation* of this NRA points out that NASA Headquarters now uses a single, unified set of instructions, entitled *NASA Guidebook for Proposers Responding to NASA Research Announcements*, that provides detailed guidance for the preparation and submission of proposals to most of its NRAs. By reference the current edition, *NASA Guidebook for Proposers– 2004*, is incorporated into this Office of Space Science solicitation; it is accessible by linking through the menu item “Helpful References” at the Web site <http://research.hq.nasa.gov> or by directly accessing <http://www.hq.nasa.gov/office/procurement/nraguidebook/>. Proposers to this program are urged to familiarize themselves with this document, in particular its Chapters 1, 2, and 3, before preparing a proposal. This NRA’s *Summary of Solicitation* also contains the schedule and instructions for the electronic submission of a *Notice of Intent* (NOI) to propose, *Cover Page/Proposal Summary/Budget Summary*, and the mailing address for the submission of proposals.

Questions about this program element may be directed to the cognizant Program Officer:

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